In The Claims:

- 1. (Amended) An equilibrium dialysis apparatus comprising:
- a body, comprising a top surface having a first plane and a bottom surface having a second plane, in which body is contained at least one testing well, each of which well is separated into a first side and a second side, by means for vertically separating the well, such that both of said sides of each well are fully open and accessible from the top surface of the body and closed on said bottom surface, wherein said body of the device comprises the material polytetrafluoroethylene, and wherein said means for vertically separating the well include dialysis membranes.
- 2. (Cancelled herewith)
- 3. (Original) The apparatus of claim 1, wherein said second plane is parallel to said first plane.
- 4. (Original) The apparatus of claim 1, wherein each said membrane separates each said well on a plane perpendicular to said first plane.
- 5. (Original) The apparatus of claim 1, wherein said body comprises a gap separating each said well into a first volume corresponding to said first side, and a second volume corresponding to said second side, and wherein said membrane, when inserted in said gap, comprises a depth and width sufficient to pass from the top of each said well through the entire depth and width of each said well.
 - 6. (Cancelled)
- 7. (Original) The apparatus of claim 1, wherein each said well comprises a drilled cavity in the body.

- 8. (Original) The apparatus of claim 1, wherein said body comprises ninety-six wells arranged in an 8x12 array.
- 9. (Original) The apparatus of claim 8, wherein said array comprises spacing and dimensions compatible with standard 96-well format laboratory supplies and instruments.
- 10. (Original) The apparatus of claim 1, wherein said body comprises at least two bars, with adjacent bars separated by a planar gap perpendicular to said first plane and in which gap said dialysis membrane is inserted, and means for holding said bars together.
- 11. (Original) The apparatus of claim 10, wherein said wells comprise a first side and a second side, separated by said planar gap.
 - 12. (Original) The apparatus of claim 11, wherein said sides comprise equal volumes.
- 13. (Original) The apparatus of claim 11, wherein said body comprises nine bars containing 96 wells arranged in an 8x12 array of such spacing and dimensions as to be compatible with standard 96-well format laboratory supplies and instruments.
- 14. (Amended) The apparatus of claim 10 wherein said means <u>for holding said bars</u> together comprise a clamp.
- 15. (Amended) The apparatus of claim 10 wherein said means for holding said bars together comprise at least one pin extending through the bars and on which all such bars can move relative to one another on a horizontal plane.
- 16. (Amended) The apparatus of claim 10 wherein said means <u>for holding said bars</u> together comprise at least one rail on which all such bars can move relative to one another on a horizontal plane.

17. (Amended) The apparatus of claim 15, wherein said means <u>for holding said bars</u> <u>together</u> further comprise two alignment pins, of a length sufficient for all bars to rest on such pins, each of which is inserted through a hole formed through both sides of each bar added.

18.-38. (Previously Cancelled)

39. (Previously Added) An equilibrium dialysis apparatus comprising:

a body, comprising a top surface having a first plane and a bottom surface having a second plane, in which body is contained at least one testing well, each of which well is separated into a first side and a second side, by means for vertically separating the well, such that both of said sides of each well are fully open and accessible from the top surface of the body and closed on said bottom surface, wherein said body comprises ninety-six wells arranged in an 8x12 array.